



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505T)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

89459-143

Date of Issuance:

9/13/24

NOTICE OF PESTICIDE:

☒ Registration  
☐ Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

RF2321 TF Plus Concentrate

Name and Address of Registrant (include ZIP Code):

James McFadden  
Central Garden & Pet  
1501 East Woodfield Road, Suite 200 West  
Schaumburg, Illinois 60173

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

*Continues page 2*

Signature of Approving Official:

Jacquelyn Herrick, Product Manager 03  
Invertebrate and Vertebrate Branch 1, Registration Division  
(7505T)

Date:

9/13/24

2. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 89459-143."
3. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

- Basic CSF dated 3/13/2023

If you have any questions, please contact Elizabeth Andrews at 202-566-2467 or at [Andrews.Elizabeth@epa.gov](mailto:Andrews.Elizabeth@epa.gov).

Enclosure

[ ] alternate language

|                 |       |    |             |
|-----------------|-------|----|-------------|
| TAU-FLUVALINATE | GROUP | 3A | INSECTICIDE |
| S-METHOPRENE    | GROUP | 7A | INSECTICIDE |

**RF2321 TF Plus Concentrate**

**Alternate brand names: [Precor Outdoor F&T Concentrate] [Precor Outdoor Flea & Tick Concentrate][ Precor Outdoor F-T-M][Precor Premise F-T-M]**

**ACTIVE INGREDIENTS:**

S-Methoprene (CAS #65733-16-6..... 10.3%

Tau-fluvalinate (CAS #102851-06-9) ..... 2.5%

OTHER INGREDIENTS: ..... 87.2%

Total 100.0%

RF2321 TF Plus Concentrate Insecticide/Acaricide is a flowable formulation containing 0.221 lbs tau-fluvalinate per gallon and 0.909 lbs (S)-methoprene /gallon.

**KEEP OUT OF REACH OF CHILDREN**

SHAKE WELL BEFORE USING

EPA Reg. No.: 89459-xxx

EPA Est. No.:

Batch/Lot No.:

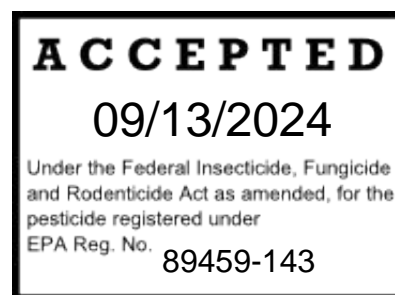
Net Contents

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes and socks
- chemical resistant gloves made of: barrier laminate, butyl rubber (>14 mils), nitrile rubber (>14 mils), neoprene rubber (>14 mils), natural rubber (>14 mils), polyethylene, polyvinyl chloride (PVC) (>14 mils), or viton (>14 mils)

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.



Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### **USER SAFETY RECOMMENDATIONS**

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

User should remove clothing / PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

User should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish and aquatic organisms. To protect the environment, do not allow pesticide to enter or runoff into storm drains, drainage ditches, gutters, or surface waters.

Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems. Use with care when applying in areas adjacent to any body of water. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. Do not apply when weather conditions favor drift from the target area.

This product is toxic to honeybees if bees are exposed to direct application. Treat during non-foraging periods to minimize adverse effects.

#### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

#### **FOR OUTDOOR USE ONLY**

#### **USE RESTRICTIONS**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Keep unprotected people, children, and pets out of treated area until spray has dried. Some sensitive pets eating or coming in contact with freshly treated plants may demonstrate vomiting and respiratory distress.

All outdoor applications, if permitted elsewhere on this label, must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses, if allowed elsewhere on this label:

1. Applications to pervious surfaces such as soil, lawn, turf and other vegetation;
2. Perimeter band treatments of 7 feet wide or less from the base of a manmade structure to pervious surfaces (e.g., soil, mulch, or lawn);
3. Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning, or other structure;
4. Applications around potential exterior pest entry points into manmade structures such as doorways and windows, when limited to a band not to exceed one inch in width;
5. Applications to vertical surfaces (such as the side of a manmade structure) directly above impervious surfaces (e.g., driveways, sidewalks, etc.), up to 2 feet above ground level;
6. Applications to vertical surfaces directly above pervious surfaces, such as soil, lawn, turf, mulch, or other vegetation) only if the pervious surface does not drain into ditches, storm drains, gutters, or surface waters.

Spot treatments must not exceed two square feet in size (for example, 2' x 1' or 4' x 0.5').

For soil or foliar applications, do not apply by ground within 25 feet (100 feet for marine/estuarine environments of freshwater lakes, reservoirs, rivers, streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

Do not spray the product into fish pools, ponds, streams, or lakes. Do not apply directly to sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.

Do not allow the product to enter any drain during or after application.

Do not apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios, except as a spot or crack-and-crevice treatment.

Do not apply to the point of runoff.

Do not make applications during rain. Avoid making applications when rainfall is expected before the product has sufficient time to dry (minimum 4 hours).

Rainfall within 24 hours after application may cause unintended runoff of pesticide application.

Do not apply when the wind speed is greater than 15 mph.

Treat surfaces to ensure thorough coverage but avoid runoff.

To treat insects harbored in voids and cracks-and-crevices, applications must be made in such a manner to limit dripping and avoid runoff onto untreated structural surfaces and plants.

### **SPRAY DRIFT ADVISORIES**

Take precautions to minimize spray drift.

### **RESISTANCE-MANAGEMENT**

For resistance management, RF2321 TF Plus Concentrate contains a Group 3A and 7A insecticide/acaricide. Any insect population may contain individuals naturally resistant to RF2321 TF Plus Concentrate and other Group 3A and 7A insecticide/acaricides. The resistant individuals may dominate the insect/tick/mite population if this group of insecticide/acaricides are used repeatedly. Appropriate resistance-management strategies should be followed. To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of RF2321 TF Plus Concentrate or other Group 3A insecticides/acaricides with different groups that control the same pests.
- Adopt an integrated pest management program for insecticide/acaricide use that includes, scouting, uses historical information related to pesticide use, record keeping and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Central Garden & Pet Company at 1-800-248-7763.

### **Application instructions**

RF2321 TF PLUS CONCENTRATE kills listed insects and kills ticks when used at labeled rates. RF2321 TF PLUS CONCENTRATE works primarily through contact action, good spray coverage is necessary. Treat when pests are immature or at a susceptible stage and populations are manageable. Repeat applications as needed, according to the specific use directions given in this label. Residues of RF2321 TF PLUS CONCENTRATE can continue to control immature [developing larval] fleas for 8 weeks. When applied to plants or vegetation, growth dilution, climatic variables, and pest habits determine retreatment needs.

### **Dilution**

Dilute at a ratio of 1.9 fl. oz. of RF2321 TF PLUS CONCENTRATE in 10 gallons water and apply dilution at 10 gallons diluted product per 1,000 sq. ft. Apply dilution as a coarse spray with thorough coverage to directly contact as many pests as possible.

### **Use sites**

Apply diluted product to outdoor use sites to control ticks including: residential, multifamily, and commercial lawns, turf and athletic fields, ornamentals, recreational areas, trees, weeds, overgrown areas, non-crop areas, runways, airports, cemeteries, parks, schoolyards, playgrounds and recreational areas, tall grass, kennels, brush, rock walls, pathways, and other outdoor green areas where ticks reside. For outdoor flea control apply diluted product to areas where pets frequent in and around dog houses, dog runs, around shrubs, outside decks, porches, (spot, crack and crevice application only) rural fields, woods, lots, roadsides, turfgrass.

For adult mosquito control apply perimeter treatments to include outside surfaces and vegetation for mosquito control, apply using a coarse low pressure spray to infested areas or to adult mosquito harborage sites.

To control listed pests, apply directly to infested areas in approved use sites. The use of a spreader-sticker, insecticidal soaps, or a product containing piperonyl butoxide may improve control of mites and some insects, such as, whiteflies, aphids, thrips, and mealybugs. RF2321 TF PLUS CONCENTRATE may be used as a tank-mix.. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. When RF2321 TF PLUS CONCENTRATE is tank-mixed with wettable powders, add powders to the tank first using good agitation. Check for physical and biological compatibility prior to use. For severe mite infestations, use RF2321 TF PLUS CONCENTRATE and use an acaricide in an alternate treatment program.

Treat during non-foraging periods to minimize adverse effects on honeybees and other pollinators.

Repeat application in 10 days but not more than 4 applications per month. Do not exceed 12 applications per year. Do not apply more than 0.34 lb ai/A and not more than once every 7 days. Ticks may be re-introduced from surrounding areas by host animals. Continue treating until frost to control adult ticks.

Consult your local extension office, pest management consultant, or a Central Garden & Pet specialist for guidance in selecting a rate and timing schedule or tank mix combination that has demonstrated good performance under specific conditions. Follow all use directions and precautions for products used in tank mix.

**Pests controlled:**

Dilute at a ratio of 1.9 fl. oz. RF2321 TF PLUS CONCENTRATE in 10 gallons water and apply 10 gallons dilution per 1,000 sq. ft.

When used as directed RF2321 TF PLUS CONCENTRATE is expected to kill the following pests:

Fleas, Ticks, American Dog Ticks, Black legged ticks, Brown Dog Ticks, Deer Ticks, , Lone Star Ticks,

Adelgids, American Cockroaches, Ants (nuisance ants), Aphids, Armyworms, Asian Lady Beetles\*, Bark Scorpions, Beetles (Flea, Cucumber, Elm Leaf), Bermuda Mites\*, Boxelder Bugs, Chinch Bugs, Clover Mites, Crickets, Cutworms, Earwigs, Fire Ants, Firebrats, Glassy-Wing Sharpshooters, Lawn Moths (Sod Webworms), Leaf-Feeding Caterpillars (i.e., Tent, Orlando, Gypsy Moth, Bagworm, Canker Worm), Leafhoppers, Lygus Plant Bugs, Mealybugs, Millipedes\*, Mites, Mosquitoes,

Oriental Cockroaches, Psyllids, Silverfish, Smoky Brown Cockroaches, Sowbugs, Spiders (excluding widow and recluse spiders), Springtails (Collembola), spotted lanternfly\*, Stink Bugs, Thrips, Two-Spotted Spider Mites, Weevils\* (Strawberry Root, Obscure Root, Blackvine Root), and Whiteflies.

\* Except in California

#### **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Store in a cool, dry place. Pesticides must be stored in a secured area away from other products, food, or feed. Keep pesticide storage areas clean. Always store pesticides in the original container. If a leaky container must be contained within another, mark the outer container to identify the contents. In case of a spill or leak, soak up with soil or other absorbent material. Do not use caustic agents.

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container Handling: Non-refillable container. Do not reuse or refill this container. Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

To the extent consistent with applicable law, Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. To the extent consistent with applicable law, Buyer assumes all risk of use and handling of this material when such use and handling are contrary to label instructions.

For more information, call 1-800-248-7763.

(Optional text below)

NOTICE: This product can expose you to chemicals including ethylene glycol which is known to the State of California to cause birth defects or other reproductive harm. For more information, visit [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

[Manufactured for]  
Central Garden & Pet Company



1501 E. Woodfield Rd., Ste 200W  
Schaumburg, IL 60173

URL

MADE IN USA

## {Marketing Claims}

Kills ticks and prevents emergence of adult fleas in outdoor areas [including Lawns, Home Perimeter, Ornamental & Flower Gardens]. Kills other listed pests.

[For Ornamental & Flower Gardens, Lawns, and [Perimeters] [Around the Home]]

Prevents outdoor emergence of adult fleas for up to 8 weeks

Controls pre-adult fleas (larvae) up to 8 weeks

Biorational [approach to] flea control outdoors

For Residential and Non-Residential Outdoor Use

For Residential and Non-Residential Turf & Ornamental Use

Combination Formula [Combi-Formulation]

Dual Active Ingredients

Dual mode formulation

Dual mode control

Microencapsulated Combination Formula [Combi-Formulation]

Insecticide plus Insect Growth Regulator [IGR]

Broad Spectrum Control

Kills [Controls] Flying and Crawling Insects

Kills Fleas and Ticks

Kills [Controls] Ticks [including] [American Dog Ticks][*Dermacentor variabilis*], [Brown Dog Ticks][*Rhipicephalus sanguineus*], [Deer Ticks][blacklegged ticks][*Ixodes scapularis*], , and [Lone Star Ticks][*Amblyomma americanum*]

Kills [controls] tick[s] that may carry Lyme disease, [babesiosis], [ehrlichiosis], [Rocky Mount Spotted Fever], [anaplasmosis], [Southern Tick-Associated Illness], , [tularemia], , [Powassan encephalitis],

Kills mosquitoes that may carry [West Nile Virus], [Eastern Equine Encephalitis], [St. Louis Encephalitis]

Kills Fleas

Kills Mosquitoes

Prevents emergence of adult fleas

Controls [Breaks] flea life cycle

Controls Flea development

Kills by contact ticks, ants, mosquitoes and listed insects

Concentrated Formula

Kills spotted lanternfly\* Except in California